N THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants

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Appl. No.

09/937,583

Filed

January 18, 2002

Title

FUEL FILTER

Grp./A.U.

1723

Examiner

Matthew O. Savage

Docket No.

68,142-015

BRIEF ON APPEAL

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

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Applicants submit the following arguments in support of this appeal in response to the Final Rejection set forth in the Official Action dated August 26, 2003.

(1) Real Party in Interest

This application was assigned by the inventor to Delphi Technologies, Inc., as evidenced by the assignment recorded at reel 012844, frame 0373.

(2) Related Appeals and Interferences

NONE

(3) Status of Claims

Claims 1-13 are on appeal and are attached hereto in the appendix. Claims 1, 2 and 4 stand rejected under 35 USC §103(a) as being unpatentable over by GB 1,083,203 (the '203 reference) in view of U.S. Patent 5,904,845 issued May 18, 1999 to Giorgio

Girondi ("Girondi"). Claims 3 and 11-12 stand rejected under 35 USC §102(a) as being unpatentable over the '203 reference and the Girondi in further view of U.S. Patent 5,382,361 issued January 17, 1995 to Phillipe Brun ("Brun"). Claims 5-6 stand rejected under 35 USC §103(a) as being unpatentable over the '203 reference and Girondi in further view of U.S. Patent 4,683,055 issued July 28, 1987 to Franz-Ulrich Bosch et al ("Baosch"). Claims 5-7 and 9 stand rejected under 35 USC §103(a) as being unpatentable over the '203 reference and Girondi in further view of U.S. Patent 5,685,278 issued November 11, 1997 to Peter Francis Bradford et al ("Bradford"). Claims 7-9 stand rejected under 35 USC §103(a) as being unpatentable over the '203 reference, Bosch or Bradford in further view of U.S. Patent 3,813,034 issued May 28, 1974 to Jay L. Lewis et al ("Lewis").

(4) Status of Amendments

No claim amendments have been filed after the mailing of the Final Office Action dated August 26, 2003.

(5) Summary of Invention

The present invention sets forth a fuel filter having a filter body 10 with opposing filter body ends. The filter body 10 defines an internal chamber 15 within which a filter medium 16 is to be located. The filter medium 16 includes an outer periphery and a filter member 16 having a first end secured to a support plate 17. The second end of the filter member 16 is secured to the filter body. The support plate has an outer periphery which engages the inner surface of the filter body 10 (See, e.g., Figures 1 and 3). The first and second ends are secured such that fuel can only flow from the outer periphery of the filter medium 16 to an inner part of the filter medium 16 by flowing through the filter medium

16 (see Figure 1 and page 5, lines 8-20). The filter body 10 is of multi-part construction. The parts of the filter body 10 are non-removably, sealingly secured to one another such that the parts of the filter body 10 form an integral whole. The filter body 10 is shaped to define an inlet port 12 and an outlet port 13 communicating with dirty and clean sides of the filter medium 16, respectively. Both the inlet and outlet ports 12, 13 are positioned at the same body end of the filter body 10.

(6) Issues

As to claims 1, 2 and 4, whether they are patentable under 35 USC §103(a) over the '203 reference and Girondi. As to claim 3 and 11-2, whether they are patentable under 35 USC §102(a) over the '203 reference, Girondi, and Brun. As to claims 5-6, whether they are patentable under 35 USC §103(a) over the '203 reference, Girondi, and Bosch. As to claims 5-7 and 9, whether they are patentable under 35 USC §103(a) over the '203 reference, Girondi, and Bradford. As to claims 7-9, whether they are patentable under 35 USC §103(a) over the '203 reference, Girondi, and Bradford. As to claims 7-9, whether they are patentable under 35 USC §103(a) over the '203 reference, Bosch or Bradford, and Lewis.

(7) Grouping of Claims

Claims 1-13 are grouped together to stand or fall together.

(8) Argument

The law is adequately set forth in the MPEP:

2143.03 All Claim Limitations Must Be Taught or Suggested [R-1]

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382,

165 USPQ 494, 496 (CCPA 1970). If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837, F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

2142 Legal Concept of *Prima Facie* Obviousness [R-1]

... The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness...

ESTABLISHING A PRIMA FACIE CASE OF OBVIOUSNESS

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not be based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP §243 - §2143.03 for decisions pertinent to each of these criteria.

The initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985).

Claim 1 is the only independent claim. Claims 2-13 are ultimately dependent upon independent claim 1.

Claims 1, 2 and 4 stand rejected under 35 USC §103(a) as being unpatentable over the '203 reference and Girondi.

The Examiner has not met the initial burden to show or teach each and every claim limitation of independent claim 1 as required by MPEP 2143.03 (see above). Specifically, the Examiner has not shown a filter medium or member having a support plate with an outer periphery which engages the inner surface of the filter body, as required by claim 1. Additionally or alternatively, the Examiner has not provided any motivation or suggestion to modify the '203 reference such that the filter member of the '203 reference engages the filter body.

The '203 reference relates to a replaceable filter for filtering contaminants of a fluid between inlet and outlet passages. The filter includes a base plate 1 which is attached directly to a flat surface or frame 3 such as an engine block by a screw threaded projection. Fluid carrying inlet and outlet passages are integral with the frame 3 and communicate with the filter by way of two openings on the flat surface 4, 5. One of the openings cooperates with the screw threaded projection. The other of the openings cooperates with an outer annular portion of the base plate 1. The base plate 1 provides a surface to which a filter member 7 is attached by way of a layer 10 which undergoes polymerization, thus bonding the filter member 7 to the base plate 1. A layer or plate 12 of similar of identical material is disposed on the distal end of the filter member to seal the second end of the filter member. The base plate 1 has openings around its edge whereby fuel is permitted to flow from an inlet port defined by the surface, though the openings, and into communication with the central tube and outlet openings via the filter member 7.

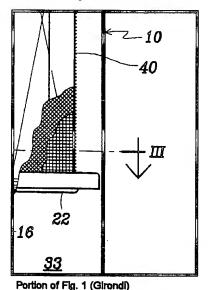
As the Examiner has readily admitted, the '203 reference does not teach the present invention as embodied in independent claim 1. *Inter alia*, the '203 reference does

not teach the support plate "having an outer periphery which engages the inner surface of the filter body" (see Final Office Action, page 2, lines 3-4 from bottom).

In applying Girondi, the Examiner makes the following statements:

"Girondi discloses an analogous filter that includes a support plate 22 that is obviously disposed in contact with an inner surface of a filter body 10 since the only flow between chambers 31 and 33 is through the flow apertures 22a (see FIGS. 1 and 3), and suggest that such a member functions as a baffle to maintain heavier contaminants within chamber 33 positioned adjacently below the support plate. It would have been obvious to have modified the support plate of '203 so as to have been in close proximity to an inner surface of the filter body as suggested by Girondi in order to maintain heavier contaminants within a chamber adjacently below the support plate." (Emphasis added).

The Examiner's statements regarding the above emphasized language are erroneous for several reasons.



First, the Examiner incorrectly states that the lower disk 22 of Girondi is "obviously disposed in contact with an inner surface of a filter body 10 since the only flow between chambers 31 and 33 is through the flow apertures 22a".

This is clearly not shown or taught by Girondi. Both Figures 1 and 3 (left and below) clearly show a gap between the inner surface of the outer container 10 and lower disk 22.

Additionally, while apertures 22a do provide "free

passage between the first chamber 31 and the third chamber 33", Girondi contains no statement that this is the only flow between chambers 31 and 33, as incorrectly suggested by the Examiner.

Thus, neither the '203 reference nor Girondi teach a support plate "having an outer periphery which engages the inner surface of the filter body" as required by claim 1.

Since both the '203 reference and Girondi are lacking at least one of the claim limitations of claim 1, applicants respectfully assert that the §103(a) rejection of independent claim 1 is improper and request that it be reversed.

Claims 2 and 4 are ultimately dependent upon claim 1. Thus, for the reasons set forth above, and based on their own merits, applicants respectfully assert that the rejection of claims 2 and 4 is also improper and request that it be reversed.

Claims 3 and 11-12 stand rejected under 35 USC

§102(a) as being unpatentable

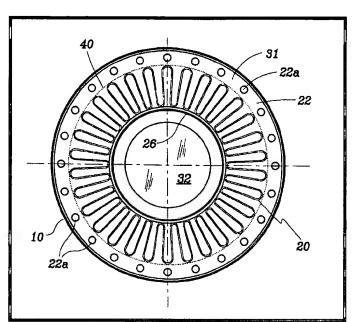


Fig. 3 (Girondi)

over the '203 reference, Girondi, and Brun. Claims 5-6 stand rejected under 35 USC §103(a) as being unpatentable over the '203 reference, Girondi, and Bosch. Claims 5-7 and 9 stand rejected under 35 USC §103(a) as being unpatentable over the '203 reference, Girondi, and Bradford. Claims 7-9 stand rejected under 35 USC §103(a) as being unpatentable over the '203 reference, Bosch or Bradford, Lewis.

Claims 3 and 5-13 are ultimately dependent upon independent claim 1. Neither Bosch, Bradford, nor Lewis, singularly or in combination overcome the deficiencies of the '203 reference to Girondi. Therefore, for the reasons set forth above, applicants respectfully assert that the §103(a) rejections of claims 3 and 5-13 are also improper and

request that they be reversed.

Lastly, in an Advisory Action dated March 9, 2004 the Examiner applicants prior arguments stating:

It is maintained that the outer periophery (sic) of the support plate 22 of Girondi obviously engages the inner surface of the filter body 10 since Girondi teaches that "The lower disc 22 has apertures 22a in its periphery to provide free passage between the first chamber 31 and third chamber 33." (see lines 41-43 of col. 2). Accordingly, the outer periphery of the plate 22 must be in contact with the body 10 because Girondi fails to mention any flow therebetween. Alternatively, one skilled in the art would substantially eliminate any gap between the plate and body in order to ensure maximum flow through the apertures as taught by Girondi. Applicant argues that the drawings of Girondi suggest a gap between the outer periphery of the plate and the body, however, applicant should note that patent drawings are not made to scale and cannot be relied upon to indicate a gap (see 37 CFR 1.84 (5) (k)).

See Advisory Action dated March 9, 2004, page 3.

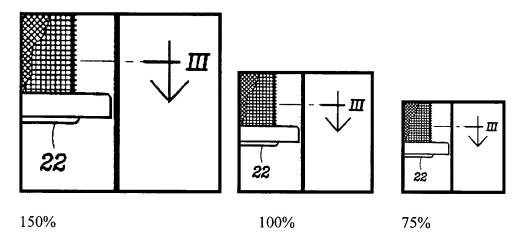
First, the Examiner's leap that because that since apertures 22a provide free passage between the chambers, the apertures 22a provide the only passage between the chambers 31, 33 is improper and not supported by any statement in Girondi.

Second, applicants do not argue that "the drawings of Girondi *suggest* a gap between the outer periphery of the plate and the body" because there clearly is a gap. Applicants have repeatedly looked for Rule 1.84 (5) (k). No such rule exists. However, Rule 37 CFR 1.84 (k) does exist and reads:

Scale. The scale to which a drawing is made must be large enough to show the mechanism without crowding when the drawing is reduced in size to two-

thirds in reproduction. Indications such as "actual size" or "scale ½" on the drawings are not permitted since these lose their meaning with reproduction in a different format.

Applicants' argument depends in no manner as to the scale of the Girondi Figures. In fact, Applicants have made copies of the Girondi Figures at different ratios (portions of which are below). After careful study, Applicant respectfully observes that there is a gap between the lower disc 22 and the body at any scale.



Scaled Portions of Fig. 1

Applicants respectfully submit that the Examiner has not established a prima facie case of obviousness of the claimed invention, since each and every claim limitation is not taught nor suggested by the cited prior art. Therefore, it is respectfully submitted that the rejections do not conform to the mandates of the MPEP as set forth above and that the rejections of the examiner should be reversed.

Respectfully submitted,

HOWARD & HOWARD ATTORNEYS, P.C.

April 9, 2004

Date

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CERTIFICATE OF MAILING

I hereby certify that the attached Appeal Brief for application serial number 09/937,583 filed January 18, 2002 is being deposited with the United States Postal Service as first class mail, postage prepaid, in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on this April 9, 2004.

Melicca S Dadieman

(9) Appendix

- body having opposing filter body ends, the filter body defining an internal chamber within which a filter medium is to be located, the filter medium including an outer periphery and a filter member having a first end secured to a support plate, and a second end secured to the filter body, wherein the support plate has an outer periphery which engages the inner surface of the filter body, said first and second ends being secured such that fuel can only flow from the outer periphery of the filter medium to an inner part of the filter medium by flowing through the filter medium, the filter body being of multi-part construction, the parts of the filter body being non-removably, sealingly secured to one another such that the parts of the filter body form an integral whole, the filter body being shaped to define an inlet port and an outlet port communicating with dirty and clean sides of the filter medium, respectively both the inlet and outlet ports being positioned at the same body end of the filter body.
- 2. (Previously Amended). The filter as claimed in Claim 1, wherein the parts of the filter body are secured to one another be means of a friction welding technique.
- 3. (Previously Amended). The filter as claimed in Claim 1, wherein the filter medium is a pleated paper filter member.
- 4. (Previously Amended). The filter as claimed in Claim 1, wherein the second end of the filter member is bonded directly to the filter body.

- 5. (Previously Amended). The filter as claimed in Claim 1, wherein the filter body further defines a second inlet port and a return port.
- 6. (Previously Amended). The filter as claimed in Claim 5, further comprising a temperature sensitive valve operable to control whether fuel entering the filter body through the second inlet port is supplied to the dirty side of the filter medium or supplied to the return port for return to a fuel reservoir.
- 7. (Original) The filter as claimed in Claim 6, wherein the temperature sensitive valve comprises a ball valve.
- 8. (Previously Amended). The filter as claimed in Claim 7, wherein the ball valve comprises a valve member which is moveable under the influence of a bimetallic element.
- 9. (Previously Amended). The filter as claimed in Claim 7, further comprising a non-return valve member resiliently biased into engagement with a seating to ensure that fuel is able to flow from the second inlet port to the return port, but to substantially prevent fuel and/or gas vapour flow in the reverse direction.
- 10. (Previously Amended). The filter as claimed in Claim 9, wherein the non-return valve member comprises a plate formed from rubber or a rubber-like material.
- 11. (Previously Amended). The filter as claimed in Claim 1, further comprising a downwardly depending tubular member which is secured to the filter body, the tubular member serving to force fuel flow in a downward direction

prior to entering the tubular member, in use.

- 12. (Previously Amended). The filter as claimed in Claim 11, wherein the tubular member is provided with one or more openings through which air is able to flow at a relatively low rate.
- 13. (Previously Presented) The filter as claimed in Claim 3, wherein the second end of the filter member is bonded directly to the filter body.